

Appl. No. 09/884,651
Amendment Dated Jun. 28, 2004
Reply to Final Office Action of Apr. 28, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1. (previously presented) A two-piece golf ball comprising:

a core having a compression in the range of about 75 PGA to about 89 PGA;

a cover having a Shore D hardness in the range of about 42 Shore D to about 60 Shore D;

an outer surface divided into a plurality of polygonal configurations, which include polar triangles; and,

a plurality of dimples comprising sets of dimples having different diameters arranged on the outer surface, wherein the polar triangles only contain dimples from one set.

Claim 2. (original) The ball of claim 1 wherein the core has a diameter in the range of about 1.535 inches to about 1.545 inches.

Appl. No. 09/884,651
Amendment Dated Jun. 28, 2004
Reply to Final Office Action of Apr. 28, 2004

Claim 3. (original) The ball of claim 1 wherein the core has a weight in the range of about 36.25 grams to about 37.25 grams.

Claim 4. (original) The golf ball of claim 1 wherein the cover further comprises:

a blend of polymers wherein said blend comprises:

a terpolymer of ethylene/methacrylic acid/n-butyl acrylate; and,

a copolymer of ethylene/methacrylic acid wherein said blend has a hardness of 53 to 59 Shore D.

Claim 5. (original) The golf ball of claim 4 wherein said terpolymer has a melt index of about 0.5 to 3 g/10 minutes.

Claim 6. (original) The golf ball of claim 4 wherein said copolymer has a melt index of about 2 to 6 g/10 minutes.

Claim 7. (original) The ball of claim 1 wherein the cover has a thickness of about 0.070 inches.

Appl. No. 09/884,651
Amendment Dated Jun. 28, 2004
Reply to Final Office Action of Apr. 28, 2004

Claim 8. (original) The golf ball of claim 1 wherein said outer surface is divided into a polyhedron defined as an icosahedron.

Claim 9. (original) The golf ball of claim 8 further comprising twenty triangles for further dividing said outer surface, said triangles consist of a plurality of polar triangles and a plurality of equatorial triangles, wherein said polar triangles are divided into seven rows, and said equatorial triangles are divided into eight rows to obtain an outer surface consisting of subdivided triangles.

Claim 10. (original) The golf ball of claim 1 further comprising:

a first set of dimples, with each dimple in the first set having a first size;

a second set of dimples, with each dimple in the second set having a second size, wherein the plurality of dimples are selected from the first set of dimples, and the second set of dimples.

Appl. No. 09/884,651
Amendment Dated Jun. 28, 2004
Reply to Final Office Action of Apr. 28, 2004

Claim 11. (original) The golf ball of claim 9 wherein sides of said polar triangles bisect dimples only from said first set of dimples and wherein said vertices of said polar triangles intersect said midpoint of dimples only from said first set of dimples.

Claim 12. (original) The golf ball of claim 8 wherein said sides of said equatorial triangles bisect dimples only from said second set of dimples and wherein said vertices of said equatorial triangle are selected from said first set of dimples.

Claim 13. (original) The golf ball of claim 9 wherein sides of each polar triangle are intersected by at least one dimple from the first set of dimples.

Claim 14. (original) The golf ball of claim 9 wherein the common sides of each equatorial triangle are intersected by a dimple from the second set of dimples.

Appl. No. 09/884,651
Amendment Dated Jun. 28, 2004
Reply to Final Office Action of Apr. 28, 2004

Claim 15. (original) The golf ball of claim 1 further comprising:

two poles,

an uninterrupted equatorial great circle path that is free of dimples and that defines a mold line symmetrically positioned with respect to said two poles on said outer surface; and

a pair of first polygonal configurations each being located on opposite sides of said outer surface with respect to mold parting line to include one of said two poles symmetrically arranged within its boundaries.

Claim 16. (original) The golf ball of claim 13 wherein said uninterrupted equatorial great circle path is not intersected by any dimples.

Claim 17. (original) The golf ball of claim 1 wherein said dimples are essentially circular with each one of said dimples having a size defined by a diameter in the range of about 0.13 inches to about 0.15 inches, and a depth in the range of about 0.0025 inches to about 0.125 inches.

Appl. No. 09/884,651
Amendment Dated Jun. 28, 2004
Reply to Final Office Action of Apr. 28, 2004

Claim 18. (original) The golf ball of claim 1 wherein the total number of dimples is at least 392.

Claim 19. (original) The golf ball of claim 4 wherein said terpolymer is 30% to 80% by weight of said blend and said copolymer is 20% to 40% of said blend.

Claim 20. (currently amended) A two-piece golf ball comprising:

a core having a compression in the range of about 68 PGA to about 78 PGA;

a cover having a Shore D hardness in the range of about 42 Shore D to about 60 Shore D; and

an outer surface divided into a plurality of polygonal configurations, ~~which include triangles~~ wherein the plurality of polygonal configurations includes polar triangles and equatorial triangles; and,

at least 392 dimples arranged on the outer surface, with a first pattern of dimples associated with each triangle, a second pattern of dimples associated with each triangle, wherein said dimples are essentially circular with each one of said dimples having a size defined by a diameter in the range of about 0.13 inches to about 0.15

Appl. No. 09/884,651
Amendment Dated Jun. 28, 2004
Reply to Final Office Action of Apr. 28, 2004

inches, and a depth in the range of about 0.0025 inches to about 0.125 inches

a first pattern of dimples associated with each polar triangle having dimples from only one set, wherein the at least 392 dimples are selected from sets of dimples having different diameters arranged on the outer surface.

Claim 21. (original) The golf ball of claim 20 wherein the cover further comprises:

a blend of polymers wherein said blend comprises:

a terpolymer of ethylene/methacrylic acid/n-butyl acrylate; and,

a copolymer of ethylene/methacrylic acid wherein said blend has a hardness of 53 to 59 Shore D.

Claim 22. (original) The golf ball of claim 21 wherein said terpolymer is 30% to 80% by weight of said blend and said copolymer is 20% to 40% of said blend.

Claim 23-24. (canceled)

Appl. No. 09/884,651
Amendment Dated Jun. 28, 2004
Reply to Final Office Action of Apr. 28, 2004

Claim 25. (currently amended) The two-piece golf ball of claim [[23]] 20 further comprising:

a second pattern of dimples associated with each equatorial triangle having dimples from all sets, wherein the at least 392 dimples are selected from sets of dimples with different diameters arranged on the outer surface.

Claim 26. (previously presented) A two-piece golf ball comprising

a core having a compression in the range of about 75 PGA to about 82 PGA;

a cover having a Shore D hardness in the range of about 42 Shore D to about 60 Shore D;

an outer surface divided into a plurality of polygonal configurations, which include polar triangles; and,

a plurality of dimples comprising sets of dimples having different diameters arranged on the outer surface, wherein the polar triangles only contain dimples from one set.